## To Sample or Not to Sample. .



## that is the question~

## by Austin Sargent

What is the difference between the Census and sample surveys? The Census counts state populations every ten years to determine the representation of each state in the U.S. House. Congress has also directed that other social and economic information be gathered at the same time. The Census goes to great lengths to count every individual in the United States. It is a large and costly undertaking and takes a long time to process the information.

A drawback is that while the Census provides a wealth of information, it only occurs once every decade. Sample survey work is frequently used to augment information in a timely manner. Statistically valid sample surveys take a "representative" slice of a larger group. For example, at the Department of Workforce Services we use sampling procedure in developing the occupation wage data. We don't survey all establishments, only a representative sample. The sample should maintain the key characteristics of the larger group. Well-designed samples are also costly and time consuming, though much cheaper than a census (counting everyone).

It is critical to insure that when a survey is designed it reflects the profile of the larger group. Each member of the sample should have an equal chance at being selected to participate – known as randomness. Good sample survey work will include statistical tests and describe the methodology used to collect the data. Sample surveys, done correctly; provide statistically valid estimates of the information being surveyed.

## **Utah Census Snapshot**

Total population: 2,233,169

Population of one race: 2,185,974

White alone: 1,992,975

Black or African-American alone: 17,657

American Indian and Alaska Native alone:

29,684

Asian alone: 37,108

Native Hawaiian and Other Pacific Is-

lander alone: 15,145

Some other race alone: 93.405

Population of two or more races: 47,195

Average household size: 3.13

Average family size: 3.57

Total households: 701,281

Households with one or more people

under 18: 321,108

Female householder, no husband present, with own children under 18:

40,329

http://quickfacts.census.gov/qfd/states/ 49000.html

**14** TrendLines